Exhibit A - For Service Subcontracts

(Insert the information required in paragraphs 11.1 and 11.2 and attach a copy to all service requisitions)

1.0 SUBCONTRACTOR ES&H PROGRAM

The Subcontractor has primary line responsibility for providing a safe working environment for its employees. He/she shall provide overview on the program's effectiveness and take appropriate corrective actions. The Subcontractor has responsibility to ensure any sub-subcontractors also comply with the Subcontractor's Environment, Safety & Health program and the requirements of this exhibit. The Subcontractor must comply with all applicable portions of 29 CFR 1910 and 29 CFR 1926.

The Subcontractor shall have an ES&H program that is commensurate with the complexity and nature of the work activities. On all subcontracts greater than $100,000 the subcontractor shall submit to the Laboratory for review and acceptance a copy of its ES&H program description. The program description ("ES&H Plan") shall be submitted within 10 calendar days of award of subcontract. The Subcontractor's ES&H program should encompass all applicable aspects of 29 CFR 1910, "OSHA Safety and Health Standards for General Industry". In addition, the plan should describe the following elements:

1.1 Management Commitment and Leadership

a. Subcontractor's policy regarding ES&H goals and how these goals are communicated to the employees;
b. Management commitment of resources to adequately implement the program;
c. Participation of management in safety meetings, inspections, and documentation;
d. How ES&H rules are incorporated into site operations; and Enforcement and disciplinary procedures.

1.2 Assignment of Responsibility

a. Management responsibility for ES&H;
b. Responsibilities, knowledge and authority of supervisor and competent persons; and
c. Employee responsibility.

1.3 Training

a. General requirements;
b. Supervisor and Competent Person training;
c. New employee training;
d. Hazard specific training;
e. Safety Meetings; and
f. Documentation of training

1.4 Basic Safety and Health Provisions

a. Emergency actions;
b. Recordkeeping and reporting of injuries;
c. Housekeeping;
d. Hazard Communication Plan;
e. Personal Protective Equipment; and
f. Fire protection and prevention.

1.5 Hazard Assessment Process

a. How hazards are identified and analyzed;
b. Preventive controls , and c. Inspections

1.6 Waste Handling and Disposal

a. Characterization of waste;
b. Packaging and Labeling requirement; and
c. Assurance that appropriate transportations and handling facilities will be used.

1.7 Other Programs dictated by Scope of Work (e.g. LOTO, Confined Space, Hearing Conservation

2.0 HAZARD ANALYSIS (HA)

A Hazard Analysis (HA) may be required for activities that are considered "high risk". An HA details the specific hazards associated with the work activities and mitigating actions (including PPE in accordance with OSHA and NFPA 70E) that the subcontractor will take to reduce or eliminate the risk of injury. Material Safety data Sheets (MSDS) and any specific procedures (confined space, LOTO) are to be submitted as part of this HA. The HA shall be submitted for Fermilab review and acceptance prior to commencement of work. Each employee will acknowledge reading and understanding the HA by placing his/her signature on the signature page. The HA is a dynamic document which will require modification as the project moves from start to finish. As the HA is updated, the employees must be advised of the new information.

3.0 STOP WORK ACTIVITY

Any Fermilab employee may stop a work activity if there is imminent danger of serious injury, fatality, or major environmental release. Work will not be permitted to continue until the hazardous situation has been eliminated.

4.0 FERMILAB SERVICE COORDINATOR (FSC)

The Fermilab Service Coordinator shall be the first line of contact with the Subcontractor's field personnel. He/she is responsible for auditing to assure that the Subcontractor is following established and accepted ES&H practices while on site.

5.0 COMPETENT PERSONS

The Subcontractor shall ensure that there is a Competent Person available on site at all times when work is in progress. The Competent Person shall have the knowledge of OSHA standards and other safety related work practices and procedures.

6.0 REPORTING REQUIREMENTS

a. All accidents or emergencies occurring at the Laboratory site must be report immediately by dialing extension 3131 from a Laboratory phone or 630-840-3131. The accident must be reported immediately to the FSC.
b. The Subcontractor shall investigate all accidents. When required by the FSC, a report must be submitted within 2 days of the accident.
c. A summary of the total man-hours worked on the project shall be submitted to the FSC on a monthly basis.

7.0 SUBCONTRACTOR SAFETY AND HEALTH RECORDS

Subcontractors shall maintain and provide to Fermilab upon request, any and all applicable occupational safety and environmental records. Such records include, but are not limited to, the records required to be maintained by federal/state regulations, OSHA injury/illness logs, training records, inspection records, safety meetings, and accident investigation.

8.0 SUBCONTRACTOR TRAINING

a. All Subcontractors performing work at Fermilab shall provide to their employees all necessary ES&H training as may be required by Federal/State regulations and as appropriate for their activities at Fermilab. Fermilab will provide appropriate training for site hazards that are unusual for the trade of the subcontractor's employees, such as training to conduct work in radiation areas or in oxygen deficient areas.
b. All Subcontractors working at Fermilab who will not be escorted by a full-time Fermilab Employee must attend Subcontractor Orientation (1/2 hour). All subcontractor employees will receive a card documenting attendance. This training must be repeated every two years.
c. The Subcontractor is responsible for assuring that their employees who do not speak English understand all ES&H requirements. The subcontractor must be able to communicate emergency instructions to those employees.

9.0 WORK SITE CONDITIONS

9.1 Fermilab Permits

Fermilab conducts work through the use of on-site permits. All required permits will be identified by the FSC who will arrange for all necessary Laboratory permits. No work activity shall be performed without the required permits. No alarms, safety devices, etc. will be disabled without prior approval of the FSC. The Subcontractor shall make a specific request to the FSC at least 48 hours before disablement. Activities requiring permits include but are not limited to: work notification, electrical work, excavation, burning/welding, modification to drinking water systems, bringing radioactive sources on site, working with/on radioactive material, working in radiological areas, and moving government or Fermilab property off site. The Subcontractor will comply with all restrictions or provisions listed on permits.

9.2 Electric Power

The Subcontractor shall provide and pay for telephone service for his requirements. Fermilab will furnish electric power at 480Y/277V and/or 208Y/120. The Subcontractor will pay cost of connection to this power source. Installation of the Subcontractor's electrical distribution will be subject to the approval of Fermilab.

9.3 Transportation of Equipment and Materials

The Subcontractor shall transport all equipment and materials to the job site at his own expense. He shall be responsible for minimizing any interference with local traffic or Fermilab operations.

9.4 Access and Traffic Ways

a. Access to the work shall be via Main Roads only. Traffic on all paved roads shall be restricted to rubber-tired vehicles only.
b. The Subcontractor shall repair at his expense any damage due to his operations to existing structures such as culverts, fencing and barricades. The Subcontractor to the satisfaction of Fermilab shall remove debris or litter on any roads caused by the Subcontractor's operations immediately. Applicable safety standards shall apply to the use of all existing roads.

9.5 Temporary Heat

The Subcontractor shall provide and pay for installation of temporary heating facilities, fuel, protective coverings and enclosures as necessary to protect the work. Coal or kerosene type salamanders, pots and open fires will not be permitted.

9.6 Temporary Lighting and Ventilation

The Subcontractor shall install and maintain temporary lighting and ventilation throughout the project to an extent that permits craftsmen to work without compromise of safe working conditions.

9.7 Water and Sanitation

Industrial water (non-potable) is available at hydrants adjacent to the site. See the Fermilab Service Coordinator for arrangements for their use. Domestic water (potable) is not available for drinking purposes. Subcontractor will be required to furnish drinking water and portable sanitation facilities for his employees.

9.8 Hazardous Materials

Any substance which by reason of being explosive, flammable, poisonous, corrosive, oxidizing, irritating or otherwise harmful, or is likely to cause death or injury shall be considered a hazardous material. The use of hazardous material shall be identified in the Subcontractor's HA and approved by the Fermilab FSC before use.

9.9 Excavation

No excavations shall proceed without an excavation permit. The Subcontractor shall request an excavation permit through the FSC at least 48 hours prior to commencement. The Subcontractor shall identify to Fermilab their Competent Person as defined in 29 CFR 1926.650(b). The Excavation Permit will be attached to the HA. Fermilab shall locate existing known hidden utilities. This locating service does not relieve the Subcontractor of his responsibility to use proper excavating techniques to find hidden utilities.

9.10 Confined Work Spaces

a. The FSC will identify all existing confined workspaces including hazards and entry operations to the subcontractor.
b. If a subcontractor is required to enter a permit-required confined space as part of their contract with Fermilab, the Subcontractor shall provide the FSC with following at least 1 week prior to entry:
c. A written copy of their confined space entry program and permit.
d. Training records for entrants, attendants, and supervisors.
e. Evidence that all air monitoring equipment is properly calibrated.
f. The subcontractor must provide all of their own personal protective equipment (PPE), such as lifelines, harnesses, respirators, tripods, ventilators, etc.
g. The FSC shall be informed prior to entering the space including any specific permit space procedures the subcontractor will follow.
h. Once the work is completed, a copy of the subcontractor's confined space permit shall be provided to the FSC annotated, if unplanned hazards were encountered.

9.11 Work on Existing Utilities

a. No work shall be performed on existing in-service piping systems without prior approval and coordination of the system outage by the FSC. Requests for such outages shall be made at least 48 hours in advance. Pressure shall be relieved on all piping systems before opening up and starting work. Lockout/Tagout shall be used by the subcontractor for al valves, blank-offs and relief lines.
b. Work on existing utilities and any testing shall be included in the HA.
c. No work shall be permitted unless specified by the job and specific procedures have been submitted and accepted by Fermilab.

9.12 Personal Protective Equipment (PPE)

The subcontractor must provide to his/her employees all required PPE and monitor to worksite to assure employees are wearing the required PPE. PPE must be in accordance with OSHA and NFPA 70E.

9.13 Burning/Welding/Brazing

a. A permit is required before a subcontractor may burn/weld. The FSC will contact the Fermilab Fire Department (FFD) and secure a Burn permit. The FFD will meet with the FSC (and possibly the subcontractor), examine the proposed operation, prescribe precautions, assure appropriate instruction has been completed, and then issue a written Burn Permit.
b. Fire watches must be maintained during burning, welding, or other fire or spark generating work and for a minimum of thirty minutes after work is complete.
c. The Subcontractor shall furnish the proper number and type of fire extinguishers as specified in the Burn Permit. The extinguishers shall be located in clear sight and no further than 50 feet from the work area.
d. All welding will be in accordance with American Welding Society Standard: Safety in Welding, Cutting, and Allied Processes (ANSI/ASC Z49.1-94).
e. UL or FM listed check valves shall be installed on oxygen-fuel torch cutting equipment.
f. No alarms, safety devices, etc. will be disabled without prior approval of the FSC. The Subcontractor shall make a specific request to the FSC at least 48 hours before disablement.

9.14 Fire Protection

a. Open burning, fire barrels, coal or kerosene type salamanders, or open flame heating devices that have exposed fuel below the flame are prohibited. Spark arrestors shall be provided on all stacks or burning devices having forced drafts. Temporary heating devices, used in any enclosed building, room, or structures shall be listed by UL, FM or other approved testing laboratory and vented to the outside. Flammable liquid fixed heaters shall be listed by UL, FM, or other approved testing laboratory and equipped with a primary safety control to stop flow of fuel in the event of a flame failure. Barometric or gravity oil feeds are not acceptable primary safety controls.
b. Smoking is prohibited in locations where flammable and/or combustible materials are stored. “No smoking” signs are posted in these areas. Smoking is prohibited in all Fermilab buildings except in designated areas.
c. Temporary closures, dust partitions or solid barriers constructed of combustible materials shall conform to the requirements of FESHM Manual Chapter 6040.1.

9.15 Lockout/Tagout

If a energy source is required to be have a Lockout/Tagout (LOTO) device applied to it, the subcontractor will submit to the FSC their LOTO procedures as part of the HA or safety plan. Subcontractor personnel must be trained in LOTO prior to participating in LOTO of hazardous energy sources and working on locked out systems or equipment.

9.16 Ground Fault Circuit Interrupter (GFCI)

GFCI protection shall be provided for electric hand-held tools, portable generators, temporary electrical extension cords, and other wiring, etc. The assured grounding program is not an acceptable alternative.

9.17 Explosives

The use of explosives is not permitted without prior written approval of the Fermilab Director or his designee.

9.18 Vehicles and Equipment

a. All motor vehicles used on the Fermilab site (excluding cranes, earth moving equipment, and material handling equipment) shall be subject to all the provisions of the Illinois Vehicle Code and Illinois “Rules of the Road” while operating at Fermilab. Operators must have an appropriate, valid driver’s license when operating vehicles on site. Seat belts are required to be provided and worn by the operator and all passengers in the vehicle.
b. Above ground fuel storage tanks are not permitted on the Fermilab site. Fuel tanks mounted on pick-up trucks or other Subcontractor vehicles for the purpose of refueling shall conform to all the requirements of the Office of the Illinois State Fire Marshall. These fueling vehicles shall be removed from the Fermilab site at night.

9.19 Housekeeping, Health and Sanitation

The Subcontractor shall plan, organize, layout and maintain the work site in an environmentally healthful manner. All areas of the work site shall be kept free of debris. rubbish, and other materials that could cause tripping or falling conditions. Access and egress to excavations, structures, and other areas shall be maintained for efficient use by personnel and equipment.

9.20 Environment Protection

All work at Fermilab shall comply with all applicable environmental executive orders, laws, regulations, and permits. All Subcontractors shall conduct their activities in an environmentally sound manner that limits the risks to the environment and protects the public health.

a. A Soil Erosion and Sedimentation Control Plan shall be prepared for any project involving excavation. Erosion controls shall be in place, where applicable,

in accordance with this plan and the Subcontractor's ES&H Plan, prior to the start of earthwork. Silt fences, windscreens, hay bales, etc., shall be used as specified on drawings as erosion control measures.

b. Excavation at or adjacent to streams, tributaries and other drainage outfalls shall be done only after prior notification to the FSC. The FSC will inform the Subcontractor if any wetlands are present in work area and what protective measures are necessary.

c. Unexpected environmental impacts shall be immediately reported to the FSC and quickly mitigated by the subcontractor.

d. Flammable and/or combustible liquids, fuels, and oils shall not be stockpiled beyond one day's usage. Storage of these materials, plus maintenance and fueling areas used by the Subcontractor, shall be properly graded and maintained and shall be located a minimum of 100 feet away from a wetland or water body boundary so that no adverse effect on the environment is done.

e. The Subcontractor shall make routine inspections to assure that all motorized equipment is free of leaks of petroleum and other toxic or hazardous materials. The Subcontractor shall keep sufficient cleanup supplies on hand (e.g. oil dry, absorbent booms, etc.) to contain/absorb any spill or leak of fuels, oils, etc. that could potentially leak from his equipment. If a spill or leak should occur, the Subcontractor should immediately take appropriate steps to contain spills, move equipment out of sensitive areas (near wetland or water body) and immediately notify the FSC.

f. At close of every work day, the Subcontractor's field superintendent shall inspect the complete work site to insure that all erosion controls, drainage patterns, excavations and staging areas are in environmentally sound condition for the weather conditions anticipated overnight or over the weekend. This inspection shall include the work of the Subcontractor as well as all sub-subcontractors. Any required correction work shall be done immediately.

9.21 Radiation Protection

a. Fermilab has policies and procedures governing radiological work. The FSC will communicate specific requirements and work practices to the Subcontractor.

b. Fermilab will assess the need for radiological training. If it is necessary it will be provided free of charge by Fermilab/

c. Radiation dosimetry will be supplied to subcontractor personnel, as necessary. The Subcontractor is responsible for returning this equipment upon request or upon completion of the work.

d. Fermilab will furnish protective clothing. Disposal of such clothing will be the responsibility of Fermilab.

9.22 Oxygen Deficiency Hazard (ODH)

a. Fermilab has policies and procedures governing work in ODH areas. The FSC will communicate specific requirements and work practices to the Subcontractor.

b. All subcontractor personnel who must enter designated ODH areas must have a level of fitness acceptable to Fermilab prior to entering those areas.

c. Fermilab will assess the need for ODH l training. If it is necessary it will be provided free of charge by Fermilab.

d. Oxygen monitoring equipment will be supplied to subcontractor personnel, as necessary. The Subcontractor is responsible for returning this equipment upon request or upon completion of the work.

e. Fermilab will furnish emergency evacuation equipment. Care, use, and return of such equipment will be the responsibility of the subcontractor.

9.23 On-going Inspections

After start of work and throughout the entire work period, the Subcontractor shall monitor and inspect its work area and operations. Field supervisors and craft foremen shall inspect tools and equipment for proper safeguards and function and shall monitor the wearing of proper PPE by all personnel.

9.24 Work Completion and Clean-up

The Subcontractor shall complete all work and all clean-up operations shall be in compliance with their ES&H program or as agreed by the Fermilab representative. Documentation for all aspects of the ES&H program shall be complete and in place before Subcontract closeout. All excess materials, equipment, waste materials and rubbish shall be properly disposed from the work site.

10.0 EMERGENCY RESPONSE

10.1 Emergency Response and Drills

a. In the event of an actual fire or severe weather, all Subcontractor personnel shall evacuate to a prearranged safe location as designated by the FSC.

b. Subcontractor personnel shall participate in all emergency drills.

c. All emergency egress routes shall be kept clear at all times.

10.2 Material Spillage

In the event of a hazardous material spill, the first person to become aware of the spill shall immediately dial 3131.

11.0 TASK SPECIFICS

11.1 Task Coordination

The Subcontractor shall coordinate work schedules, site access, and resolution of technical issues with _____ at phone _____.

11.2 Specific training and exemptions

List additional training/exemptions, if appropriate

_____.

_____.